## REMARKS

Claims 1, 3, 4 and 8-10 are pending in this application, all of which have been amended. No new claims have been added.

Claims 1, 4, 8 and 10 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent 6,000,128 to Umeno et al. (hereinafter "**Umeno et al.**") in view of Legal Precedent.

Applicants respectfully traverse this rejection.

**Umeno et al.** discloses a process of producing a multi-layered printed-coil substrate as a planar magnetic component for use as a transformer or a choke in a switched mode power supply circuit, etc. in which several types of printed-coil substrates having individually different coil patterns A, B, A' are prepared. Some of these patterns are selected depending upon the desired characteristics of planar magnetic component, and the selected substrates are layered to obtain a multi-layered printed-coil substrate. A printed-coil component, wherein pin terminals erected on insulating bases are inserted through through-holes formed in the printed-coil substrate having patterned coils in a single or several layers and pin terminals are soldered to the through-holes.

**Umeno et al.** differs from the present invention in the following ways:

1. **Umeno et al.** is directed to a switching power supply, as shown in FIG. 6. In contrast, the present invention is directed to an electronic communication circuit including receiver coils indirectly coupled to a transmitter coil separately arranged in laminated substrates. Thus, contrary to the Examiner's assertions, **Umeno et al.** does not disclose that any of the coils are connected to either a transmitter circuit or a receiver circuit, as in the present invention.

2. The switching power supply shown in FIG. 6 of **Umeno et al.** fails to disclose the following recitation in claim 1 of the instant application:

> wherein said transmitter circuit changes a potential of one end of said first coil from a first potential to a second potential in response to a change of a transmission digital signal from zero to one, changes a potential of the other end of said first coil from said first potential to said second potential in a predetermined delay, changes a potential of said one end of said first coil from said second potential to said first potential in response to a change of said transmission digital signal from one to zero, and changes a potential of said other end of said first coil from said second potential to said first potential in a predetermined delay.

3. The switching power supply shown in FIG. 6 of **Umeno et al.** fails to disclose the following recitation in claim 8 of the instant application:

> wherein said transmitter circuit connects one end of said first coil to two potentials selectively in response to a transmission digital signal and maintains the other end of said first coil in an intermediate potential between said two potentials.

4. Column 5, lines 35-42 and column 7, lines 28-38 of **Umeno et al.** disclose that A, B and A' are various types of printed-coil substrates which are available for use in assembling either transformer 13 or choke 14 in the power supply shown in FIG. 6 of **Umeno et al.**. Printed-coil substrates A, B, and A' therefore do not correspond to first, second and third coils formed on first, second and third substrates, respectively, as recited in claims 1 and 8 of the instant application.

5. Because column 8, line 44 of **Umeno et al.** discloses that reference character 20 of FIG. 15 is fillet solder, substrates 1a, 1c, 1e are electrically connected and substrates 1b, 1d are electrically connected. Table 1 in column 6 of **Umeno et al.** shows that substrates 1a, 1c, 1e form the primary coil of transformer 13 (FIG. 6); substrates 1b, 1d form the secondary coil of transformer 13; substrates 1a, 1c, 1e form the secondary coil of choke 14 (FIG. 6); and substrates 1b, 1d form the primary coil of choke 14.

Therefore primary coil and secondary coil of transformer 13 are inductively coupled, and primary coil and secondary coil of choke 14 are inductively coupled. Thus, **Umeno et al.** fails to disclose the third coil and third substrate of the present invention.

Accordingly, the preambles of claims 1, 3-4 and 8-10 have been amended to recite an electronic communications circuit.

Applicants' attorney conducted a telephone interview with the Examiner on December 3, 2009.

In the interview, proposed amendments and patentability arguments were presented. In response to these arguments that **Umeno et al.** fails to disclose a transmitter or receiver circuit, the Examiner replied that elements 15-19 shown in FIG. 6 of **Umeno et al.** constitutes elements which could provide a transmitter function. In response to argument #4 above, the Examiner urged that there are five (5) substrates and six (6) coils disclosed in **Umeno et al.** With regard to argument #5 above, the Examiner appeared to disregard the argument that, with the way the coils in **Umeno et al.** are connected, none of them form the third coil on the third substrate of the present invention, as recited in claim 1.

The Examiner urged that additional features of the transmitter circuit and/or the receiver circuit should be claimed in order to distinguish the claimed invention over the prior art of record.

Accordingly, claims 1 and 8 have been amended to recite that the transmitter circuit has a delay element 121, as shown in FIG. 2, which is not disclosed in **Umeno et al.**

Thus, the 35 U.S.C. §103(a) rejection should be withdrawn.

Claims 3 and 9 under 35 U.S.C. §103(a) as unpatentable over **Umeno et al.** in view of **Weber et al.** (previously applied).

Applicants respectfully traverse this rejection.

**Weber et al.** discloses an arrangement for signal transmission between chip layers of a vertically integrated circuit, such that "a defined, inductive signal transmission ensues between a part of the vertically integrated circuit in one chip layer and a further part of the vertically integrated circuit in a further chip layer by means of a coupling inductance formed by respective coils in the two layers. Particularly given high connection densities, a large number of freely placeable and reliable vertical signal connections can be produced directly from the inside of one chip layer to the inside of a neighboring chip layer without extremely high demands being made on the adjustment of the chip layers relative to one another and on the surface planarity of the individual chip layers." (see "Abstract").

The Examiner has recited **Weber et al.** for teaching in FIG. 7 a receiver circuit that connects only one end of the resistors $R_1$ to a predetermined voltage source. However, the Examiner urges that the prior art structure (which discloses resistors $R_1$ and $R_2$ connected to a predetermined voltage source) is capable of performing the intended use (connects both ends of said second coil to a predetermined voltage source via resistors), so then it meets the claim.

Applicants respectfully disagree. FIG. 6 of **Umeno et al.** shows a circuit arrangement for a switching power supply utilizing substrate options A, B and A' for transformer 13 and choke 14 which does not utilize two resistors respectively connecting both ends of any of the coils in transformer 13 or choke 14 to one predetermined voltage source, and there would be no motivation to use the teachings of the reception stage shown in FIG. 7 of **Weber et al.** to modify the power supply circuit shown in FIG. 6 of **Umeno et al.** in such a manner.

**Weber et al.** fails to disclose "two resistors that respectively connect both ends of coil to one predetermined voltage source," as recited in claim 3 of the instant

application. The structure recited in claim 3 makes it possible that "the center voltage of voltage amplitude occurring at both ends of the receiver coil L2 when receiving signals can be made into a voltage value Vbias optimized for signal amplification." (paragraph 0052). Neither of the cited references can realize this feature.

Thus, the 35 U.S.C. §103(a) rejection should be withdrawn.

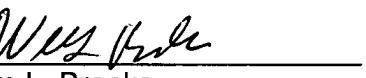
In view of the aforementioned amendments and accompanying remarks, claims 1, 3-4 and 8-10, as amended, are in condition for further examination, which action, at an early date, is requested.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: December 30, 2009

Respectfully submitted,

**CUSTOMER NO.: 21874**

By 

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